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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/535,626

12/02/2005

Seijiro Tomita

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EXAMINER

NGUYEN, PHU K

ART UNIT

PAPER NUMBER

2628

MAIL DATE

DELIVERY MODE

10/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/535,626

Applicant(s)

TOMITA, SEIJIRO

Examiner

Phu K. Nguyen

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


PHU K. NGUYEN
PRIMARY EXAMINER
GROUP 2300

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over STREET (5,936,774) in view of Becker (4,934,773)

As per claim 1, Street teaches the claimed "light source device for three-dimensional display having an image display means, wherein the image display means forms an image using transmitted light" (Street, the display system in figure 4).

Applicant's arguments filed July 26, 2007 have been fully considered. Applicant argues that Street's light source is LCD, not LED as claimed. However, Becker teaches that the use of LED as light source is well known; specifically, Spoonhower teaches "a LED array having white LEDs or RGB LEDs arranged in two horizontal rows one above the other" (Becker, Abstract) and "a LED control means for performing an on-off control on the horizontal rows of the white LEDs or RGB LEDs in the LED array" (Becker, figure 5, LEDs 18A and 18B). It would have been obvious to alternatively use the LED and LCD as a light sources because of their equivalences in providing lights for display (Becker, column 7, lines 3-24).

Claim 2 adds into claim 1 "the display is a three-dimensional display to present

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different images to right and left eyes of an observer and the upper and lower LED arrays constitute a light source portion for presenting an image for the right eye and a light source portion for presenting an image for the left eye, respectively” (Becker, column 7, lines 3-24).

Claim 3 adds into claim 2 “the three-dimensional display has a position identifying means which measures a position of an observer relative to the three-dimensional display and outputs a corresponding position signal, and the LED control means performs a turn-on control on the white LEDs or RGB LEDs based on the position information so as to keep an image viewable by the observer” (Street, the head tracking system 46; Becker, column 7, lines 25-52).

Claim 4 adds into claim 2 “the three-dimensional display has a controller operated by the observer, and the LED control means performs an on-off control on the white LEDs or RGB LEDs based on operation information from the controller so as to change an image viewed by the observer” (Becker, column 4, lines 23-33).

Claim 5 adds into claim 1 “the three-dimensional display has a position identifying means which counts the number of observers, measures positions of the observers relative to the display and outputs corresponding position signals, and the LED control means performs an on-off control on the white LEDs or RGB LEDs based on the position information so as to keep images viewable by the observers” (Street, the

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head tracking system 46).

Claim 6 adds into claim 1 “the control means performs a turn-on control on the right-eye image light source portion and the left-eye image light source portion of the light array” (Street, column 8, lines 30-50; column 9, lines 27-40).

Claim 7 adds into claim 2 “the light control means changes an interval between lighted parts of the right-eye image light source portion and the left-eye image light source portion of the array according to a distance of an observer from the display” (Street, column 10, lines 57-62).

Claim 8 adds into claim 1 “the two horizontal rows, one above the other, of the white LEDs or RGB LEDs in the LED array is arranged such that the white LEDs or RGB LEDs in one of the rows are placed side by side with or alternated to those in the other row, and the LED control means performs the turn-on control on the horizontal rows of the white LEDs or RGB LEDs in the LED array” (Becker, column 4, lines 23-33)

Claim 9 adds into claim 1 “the LED control means turns on appropriate white LEDs in the LED array and scans the illuminating LEDs across the LED array at high speed in a horizontal direction” (Becker, column 3, lines 43-60).

Claim 10 adds into claim 1 "the system is used on three- or two-dimensional displays of television sets, game machines, personal computers, cell phones or mobile terminals" which Street does not explicitly teach. However, it would have been obvious to use Street's LCD display in the display of television sets, game machines, personal computers, cell phones or mobile terminals as widely used at the time the invention was made for the purpose of light weight and flat screen of the LCD display.

In review Applicant's disclosure, it is noted that Applicant likely possesses the English translations of the Japanese references cited in the Documents submitted in 371 Applications (JP 10-253925, 8-201726, 8-68962) to assist Applicant's representatives. **Applicant is requested to provide these English translations** since they are clearly related to the claimed invention as shown in the 371 applications.

Due to new ground of the invention, this action has been made NON-FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (571) 272 7645. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272 7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phu K. Nguyen
October 10, 2007


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